

IN THE CLAIMS

Please amend Claims 1-10, to read as follows.

1. (Currently Amended) An ink jet record head comprising:
a plurality of nozzles through which liquid flows;
a supply chamber for supplying the liquid to each of the nozzles; [[and]]
a plurality of discharge ports which are nozzle end openings for discharging [[a]] liquid
~~droplet, droplets;~~
an element substrate on which a plurality of discharge energy generating elements, for
generating thermal energy for discharging the liquid droplets, are provided; and
a flow path composition substrate having said plurality of discharge ports and being
joined to a principal surface of said element substrate, so as to form said plurality of nozzles,
wherein each of said nozzles [[has]] comprises:
~~a flow path composition substrate comprised of~~ a bubbling chamber in which a bubble is
generated by [[a]] one of said discharge energy generating elements ~~for generating thermal~~
~~energy~~ for discharging the liquid droplet, a discharge port portion[[s]] including a respective one
of said discharge ports and communicating ~~between~~ with said discharge port[[s]] and said
bubbling chamber, and a supply path for supplying the [[ink]] liquid to the bubbling chamber[[;
and]],
~~an element substrate on which said discharge energy generating element is provided and~~
~~joining said flow path composition substrate with the principal surface, and~~
wherein each of said discharge port portions [[has]] comprises:

a first discharge port portion of an almost fixed diameter including said respective discharge port; and

a second discharge port portion contiguous to the first discharge port portion and communicating in steps with said first discharge port portion and said bubbling chamber, respectively, and

wherein a boundary portion between said second discharge port portion and said bubbling chamber and ~~[[the]]~~ a boundary portion between said second discharge port portion and said first discharge port portion are continuously formed by a wall having a curvature.

2. (Currently Amended) The ink jet record head according to claim 1, wherein said second discharge port portion has a wall ~~vertical~~ perpendicular to the principal surface of said element substrate and contiguous to the wall having said curvature, in the boundary portion between said second discharge port portion and said bubbling chamber.

3. (Currently Amended) The ink jet record head according to claim 1, wherein said nozzles are formed ~~by orthogonalizing~~ so as to orthogonalize a discharge direction in which liquid droplets fly from the discharge ~~port~~ ports and a flow direction of the liquid flowing in said supply ~~path~~ paths.

4. (Currently Amended) The ink jet record head according to claim 2, wherein said nozzles are formed ~~by orthogonalizing~~ so as to orthogonalize a discharge direction in which

liquid droplets fly from the discharge ~~port~~ ports and a flow direction of the liquid flowing in said supply ~~path~~ paths.

5. (Currently Amended) The ink jet record head according to claim 1, wherein said flow path composition substrate ~~has a plurality of said discharge energy generating elements and a plurality of said nozzles, and is equipped with~~ has a first nozzle sequence having ~~[[the]]~~ nozzles in a longitudinal direction arranged in parallel and a second nozzle sequence having ~~[[the]]~~ nozzles in the longitudinal direction arranged in parallel at positions opposed to the nozzles of the first nozzle sequence across said supply chamber, respectively, while the nozzles in the second nozzle sequence are arranged so that the pitches ~~among the~~ between adjacent nozzles are mutually deviated by ~~[[a]]~~ 1/2 pitch ~~against~~ with respect to the nozzles in the first nozzle sequence.

6. (Currently Amended) The ink jet record head according to claim 1, wherein the bubbles generated by said discharge energy generating ~~element~~ elements communicate with the outside air by passing through said discharge ~~port~~ ports.

7. (Currently Amended) The ink jet record head according to claim 2, wherein the bubbles generated by said discharge energy generating ~~element~~ elements communicate with the outside air by passing through said discharge ~~port~~ ports.

8. (Currently Amended) The ink jet record head according to claim 3, wherein the bubbles generated by said discharge energy generating ~~element~~ elements communicate with the outside air by passing through said discharge ~~port~~ ports.

9. (Currently Amended) The ink jet record head according to claim 4, wherein the bubbles generated by said discharge energy generating ~~element~~ elements communicate with the outside air by passing through said discharge ~~port~~ ports.

10. (Currently Amended) The ink jet record head according to claim 5, wherein the bubbles generated by said discharge energy generating ~~element~~ elements communicate with the outside air by passing through said discharge ~~port~~ ports.